

LISTING OF THE CLAIMS

A current listing of the claims with status identifiers is as follows:

1. (Currently Amended) Method for detecting oscillation in a repeater system comprising:
embedding processing communication signals in a wireless communication device circuit
embedded in the a repeater; and

using the communication signals processed at the wireless communication device circuit
to determine if the repeater system is in oscillation.
2. (Original) The method of claim 1, wherein using the wireless communication device
circuit comprises:

establishing a call from the wireless communication device circuit to a base station; and

determining oscillation if the call cannot be established.
3. (Original) The method of claim 1, wherein using the wireless communication device
circuit comprises:

using the wireless communication device circuit to measure signal quality from the base
station; and

determining oscillation if the signal quality meets a certain criteria.
4. (Original) The method of claim 3, wherein determining oscillation comprises
determining oscillation if the signal quality degrades below a certain level.
5. (Original) The method of claim 3, wherein determining oscillation comprises

determining oscillation if the signal quality degrades from a level that existed before the repeater was used.

6. (Original) The method of claim 3, wherein using the wireless communication device circuit comprises:

obtaining signal to noise ratio value to measure the signal quality.

7. (Original) The method of claim 1, wherein using the wireless communication device circuit comprises:

using the wireless communication device circuit to estimate at least one open loop power control parameter;

establishing a communication link from the wireless communication device circuit to a base station using the estimated open loop power control parameter;

receiving at least one closed loop power control command from the base station; and

determining oscillation if the closed loop power control command is greater than a certain amount.

8. (Original) The method of claim 7, wherein using the wireless communication device circuit comprises estimating at least a required transmit power to complete the call, wherein receiving closed loop power control commands comprises receiving at least power adjustment information, and wherein determining oscillation comprises determining oscillation if the power adjustment information is greater than a certain amount.

9. The method of claim 1, further comprising: reducing gain of repeater if the repeater

system is in oscillation.

10. (Currently Amended) Apparatus for detecting oscillation in a repeater system comprising:

a wireless communication device circuit embedded in ~~the~~ a repeater, wherein the wireless communication device circuit is configured to process communication signals; and

means for using the communication signals processed at the wireless communication device circuit to determine if the repeater system is in oscillation.

11. (Original) The apparatus of claim 10, wherein means for using the wireless communication device circuit comprises:

means for establishing a call from the wireless communication device circuit to a base station; and

means for determining oscillation if the call cannot be established.

12. (Original) The apparatus of claim 10, wherein means for using the wireless communication device circuit comprises:

means for using the wireless communication device circuit to measure signal quality from the base station; and

means for determining oscillation if the signal quality meets a certain criteria.

13. (Currently Amended) The apparatus of claim 12, wherein means for determining oscillation ~~comprises determining~~ is configured to determine oscillation if the signal quality degrades below a certain level.

14. (Currently Amended) The apparatus of claim 12, wherein means for determining oscillation ~~comprises determining is configured to determine~~ oscillation if the signal quality degrades from a level that existed before the repeater was used.

15. (Original) The apparatus of claim 12, wherein means for using the wireless communication device circuit comprises:

means for obtaining signal to noise ratio value to measure the signal quality.

16. (Original) The apparatus of claim 10, wherein means for using the wireless communication device circuit comprises:

means for using the wireless communication device circuit to estimate at least one open loop power control parameter;

means for establishing a communication link from the wireless communication device circuit to a base station using the estimated open loop power control parameter;

means for receiving at least one closed loop power control command from the base station; and

means for determining oscillation if the closed loop power control command is greater than a certain amount.

17. (Currently Amended) The apparatus of claim 16, wherein means for using the wireless communication device circuit ~~comprises estimating is configured to estimate~~ at least a required transmit power to complete the call, wherein means for receiving closed loop power control commands comprises means for receiving at least power adjustment information, and wherein

means for determining oscillation ~~comprises determining~~ is configured to determine oscillation if the power adjustment information is greater than a certain amount.

18. The apparatus of claim 10, further comprising:

means for reducing gain of repeater if the repeater system is in oscillation.

19. (Currently Amended) ~~An apparatus of~~ for detecting oscillation in a repeater system comprising:

a wireless communication device (WCD) configured to detect if the repeater system is in oscillation based on communication signals processed at the WCD; and

a processor coupled to the WCD, configured to reduce the gain of the repeater system if the repeater system is in oscillation.

20. (New) The method of claim 1, wherein the using step uses the ratio of energy of a chip of a pilot signal to total interference (E_c/I_o) obtained from the processed communication signals to determine if the repeater system is in oscillation.

21. (New) The method of claim 2, wherein the call is initiated at the wireless communication device circuit.